

ABSTRACT

An arrangement for controlling a system according to the deviation between the value measured on the system and the value estimated by means of a model of the controlled system of at least one control parameter is disclosed. The arrangement comprises a neural network, which generates the estimation of the control parameter according to a set of characteristic parameters of the controlled system and of respective configuration parameters. The neural network has associated thereto a training module, which can train said neural network by modifying said configuration parameters according to a set of updating data. An acquisition module acquires the actual value, as measured on the controlled system, of a set of sensing parameters comprising at least one from among said control parameter and said characteristic parameters of the controlled system. A variation module is sensitive to the variation of said control parameter and generates an update-enable signal when the control parameter falls outside a pre-set tolerance range. The acquisition module being sensitive to said update-enable signal for transferring to the training module, as updating-data set, said set of sensing parameters. A preferential application is for the control of fuel-cell stacks.